

Drought Task Force Summary

4 September 2012

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SDSU Extension/AES/ABE



Drought Issues Summary

- Conditions static - worsening
 - A little rain in the east/north
 - Warm temperatures returned
 - DM increased coverage (more likely coming)
 - Fall planting concerns
- Transitioning to water/environmental drought
 - Sioux Falls more watering restrictions
 - Continued fire issues
- New Outlooks
 - No real improvement foreseen, yet

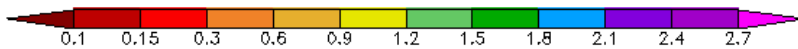
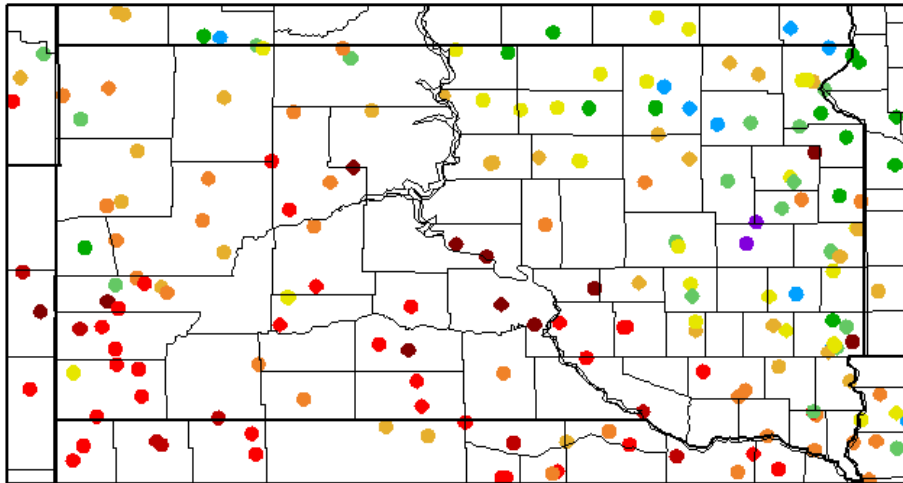


Other notes

- Eight stations June – August driest on record
 - Vermillion, Yankton, Centerville, Ft. Meade, Sioux Falls, Marion, Winner, Menno
 - Four in top five driest, White Lake, Academy, Mitchell, Clear Lake
- June –August record temperatures – fewer
 - Belle Fourche, Martin,
 - Another 7 in top 5 warmest
- Yields
 - Private forecast would say 60% yield loss in the southeast.
- Near record state highs for August last week – Academy 113 F.
 - Several others 110 F or above



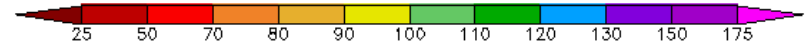
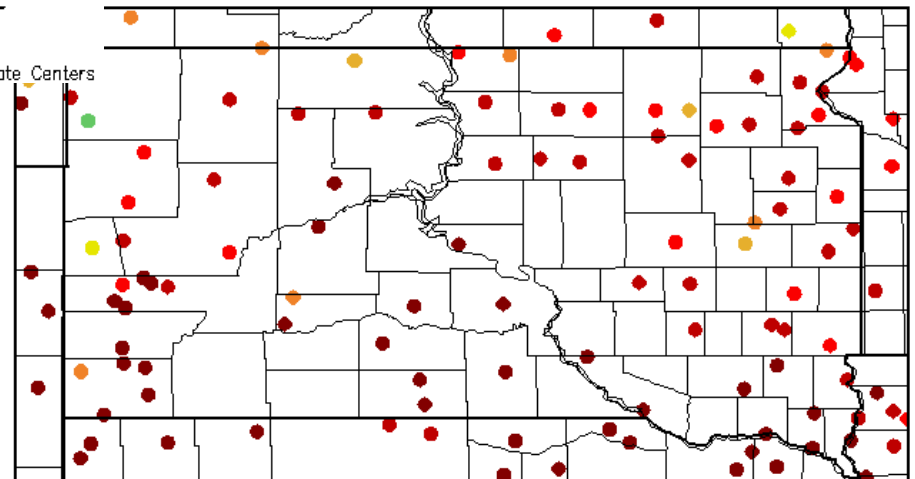
Precipitation (in) 8/5/2012 – 9/3/2012



Generated 9/4/2012 at HPRCC using provisional data.

Regional Climate Centers

Percent of Normal Precipitation (%) 8/5/2012 – 9/3/2012



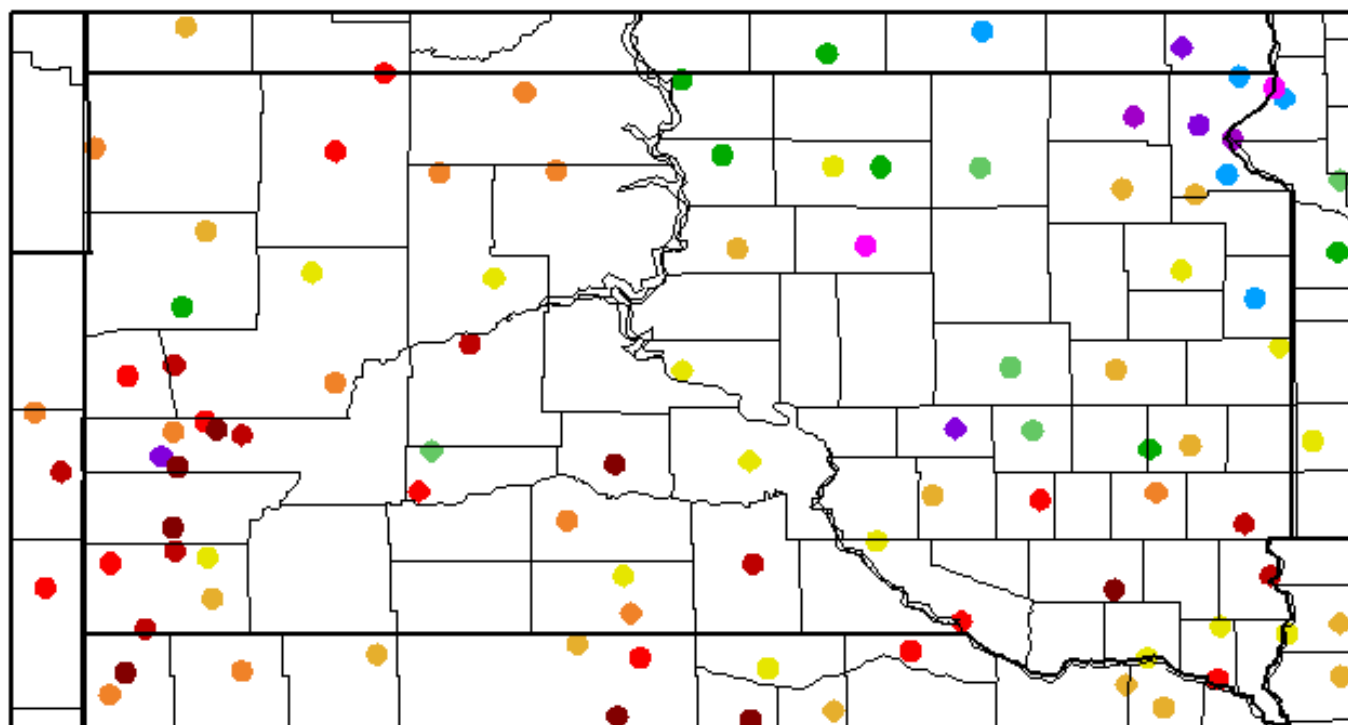
Generated 9/4/2012 at HPRCC using provisional data.

Regional Climate Centers



<http://www.hprcc.unl.edu/maps/current/>

Departure from Normal Temperature (F) 8/5/2012 – 9/3/2012



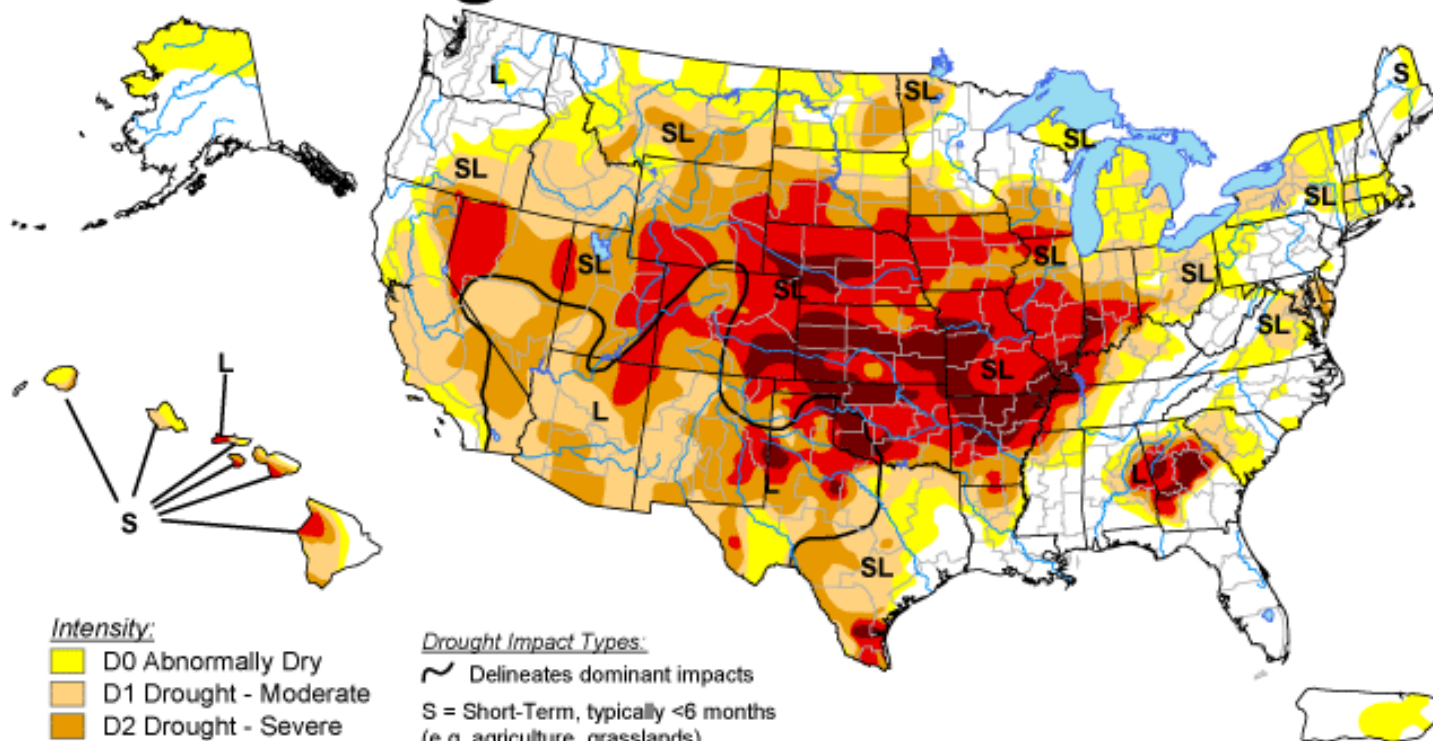
Generated 9/4/2012 at HPRCC using provisional data.

Regional Climate Centers



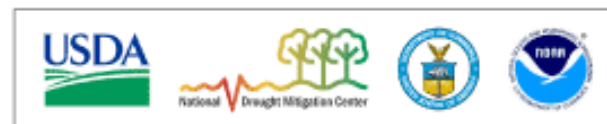
U.S. Drought Monitor

August 28, 2012
Valid 7 a.m. EDT



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu/>



Released Thursday, August 30, 2012

Author: Brian Fuchs, National Drought Mitigation Center



Changes will be coming this week due to Isaac – precipitation.

U.S. Drought Monitor

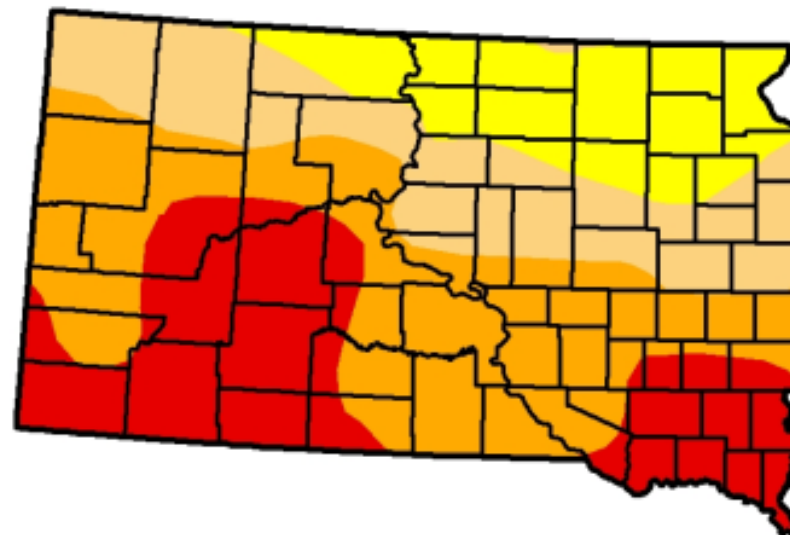
South Dakota

August 28, 2012

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	83.30	60.98	26.44	0.00
Last Week (08/21/2012 map)	0.00	100.00	82.78	59.29	17.95	0.00
3 Months Ago (05/29/2012 map)	76.94	23.06	0.41	0.00	0.00	0.00
Start of Calendar Year (12/27/2011 map)	48.14	51.86	13.86	2.11	0.00	0.00
Start of Water Year (09/27/2011 map)	71.37	28.63	7.36	0.00	0.00	0.00
One Year Ago (08/23/2011 map)	82.28	17.72	0.52	0.00	0.00	0.00



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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<http://droughtmonitor.unl.edu>

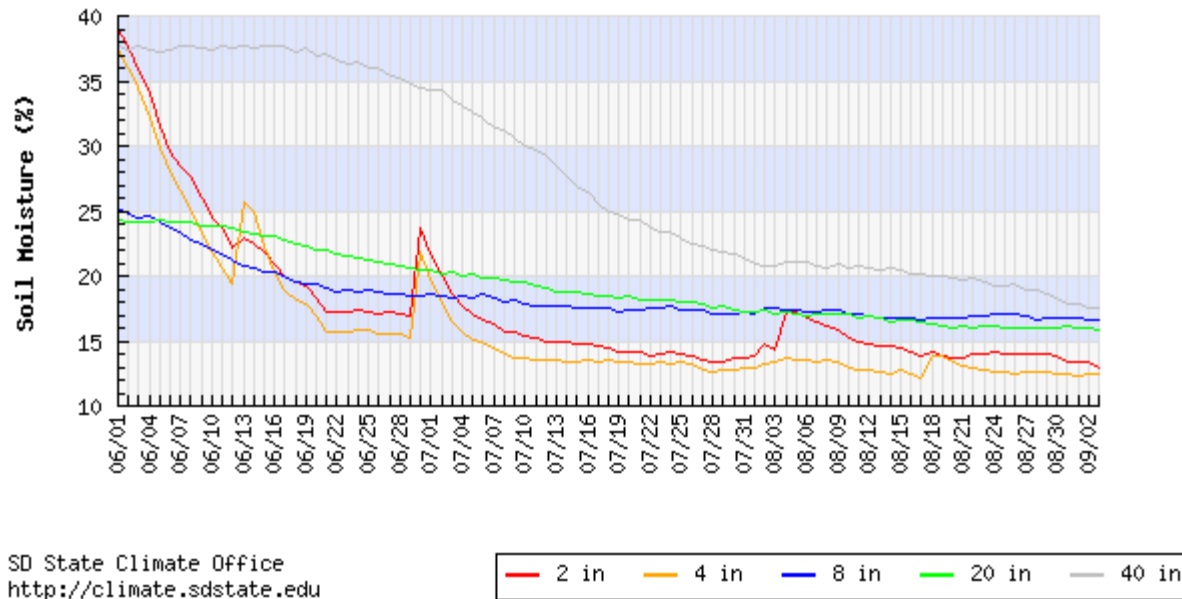


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Brian Fuchs, National Drought Mitigation Center

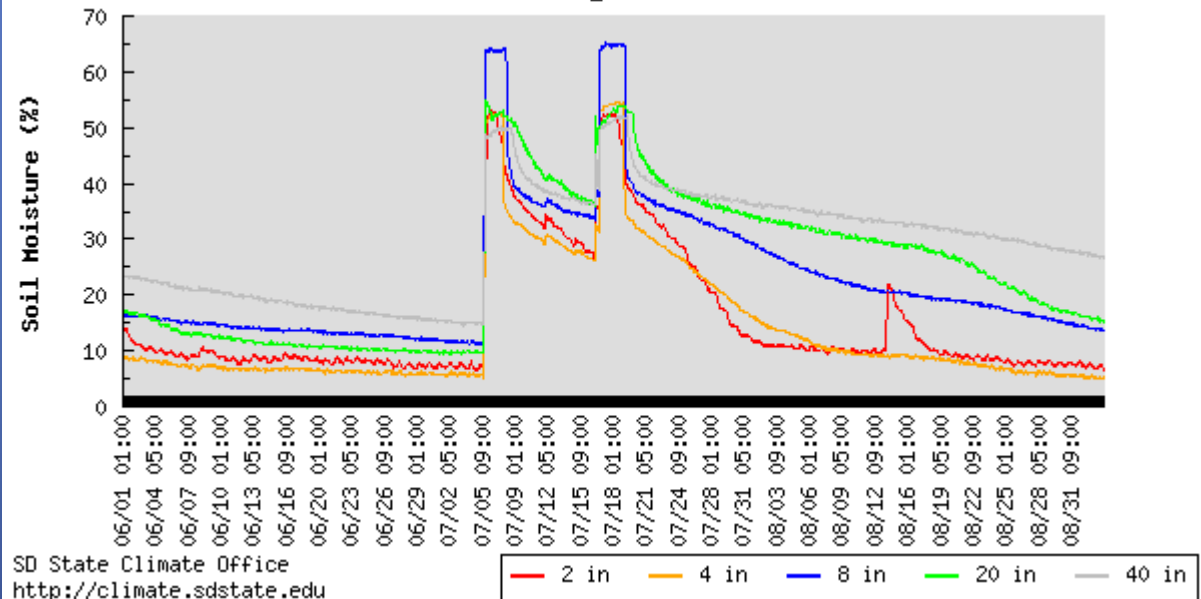


Changes will be coming this week –likely increased coverage of higher end drought.

Soil moisture for BERESFORD (6/1/2012 - 9/3/2012)



Soil moisture for ANTELOPE_RANGE (6/1/2012 - 9/3/2012)



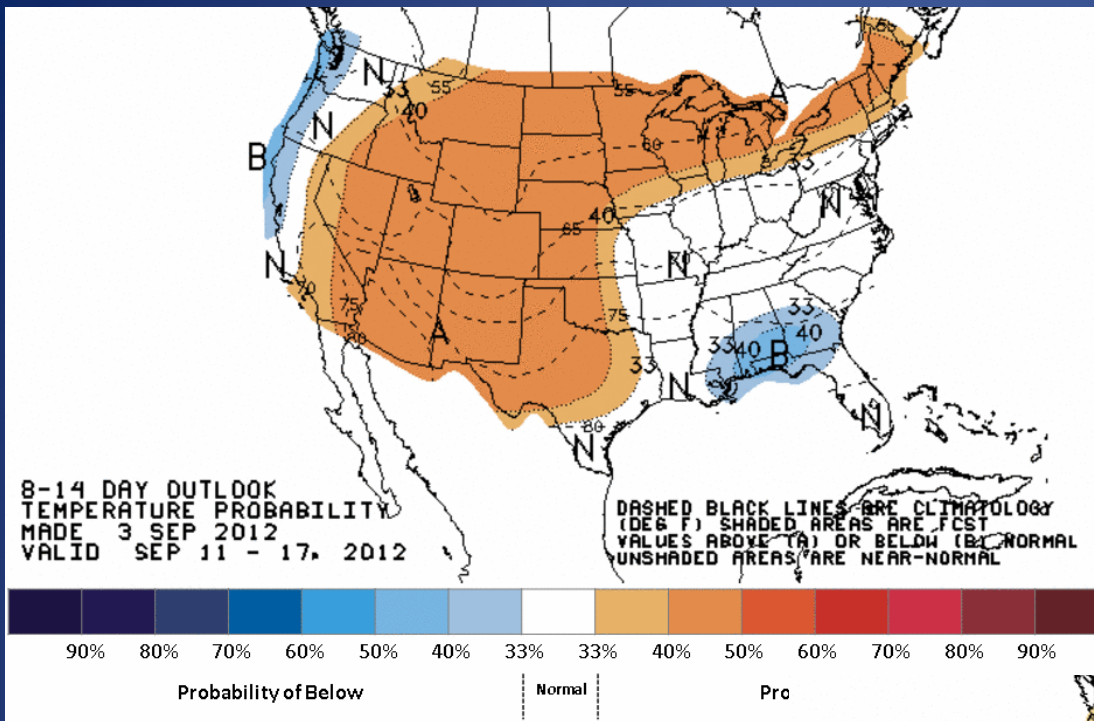
SD State Climate
 Office
 Soil Moisture

<http://climate.sdstate.edu/awdn/soil/soil.asp>

8-14 day

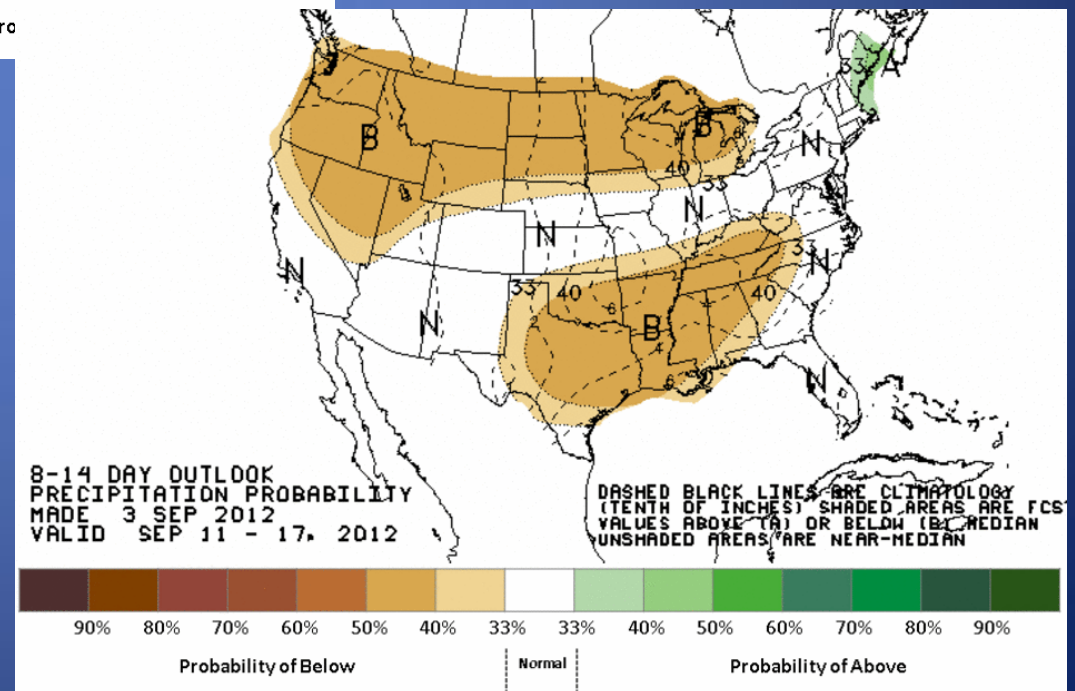
Temperature

Precipitation

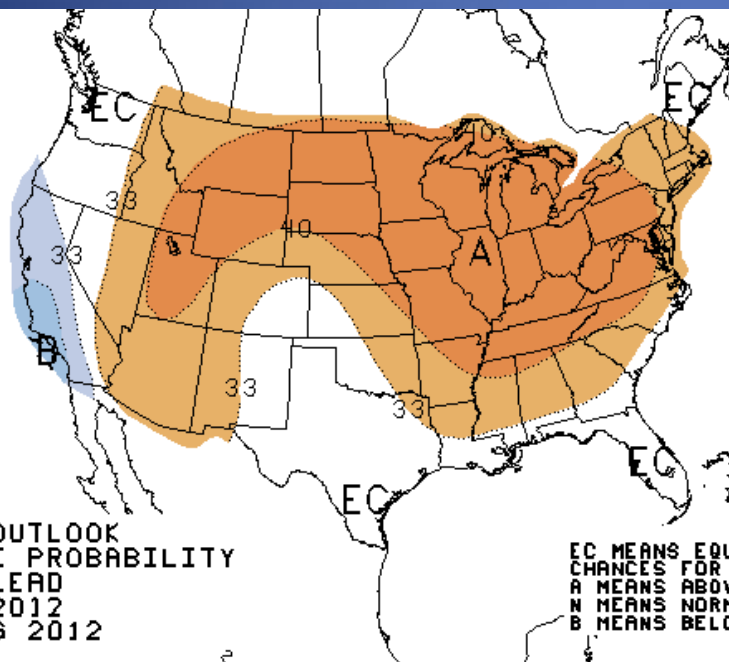


<http://www.cpc.ncep.noaa.gov>

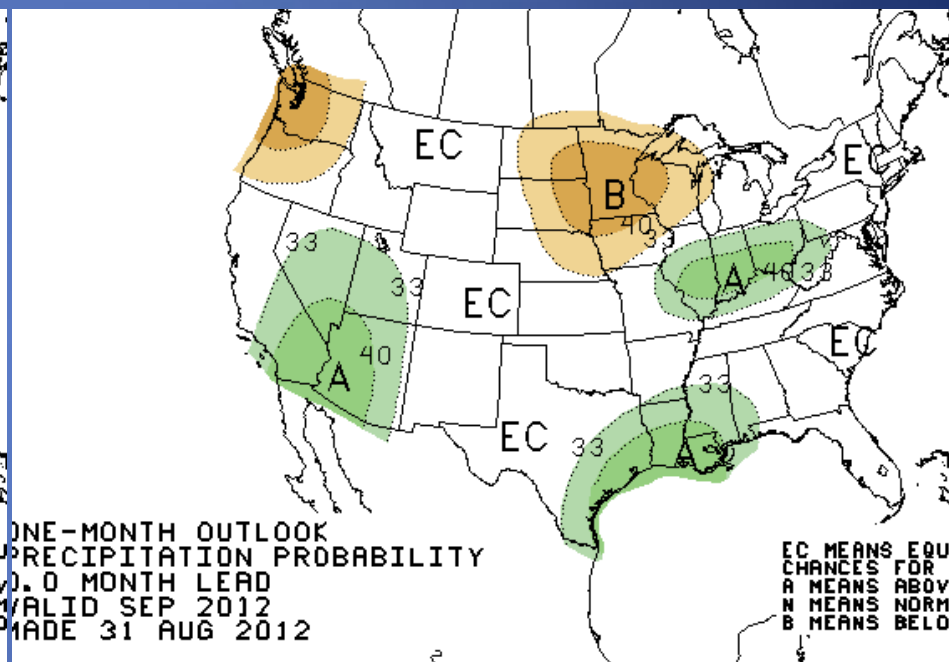
Issued daily



September Temperature and Precipitation Probabilities

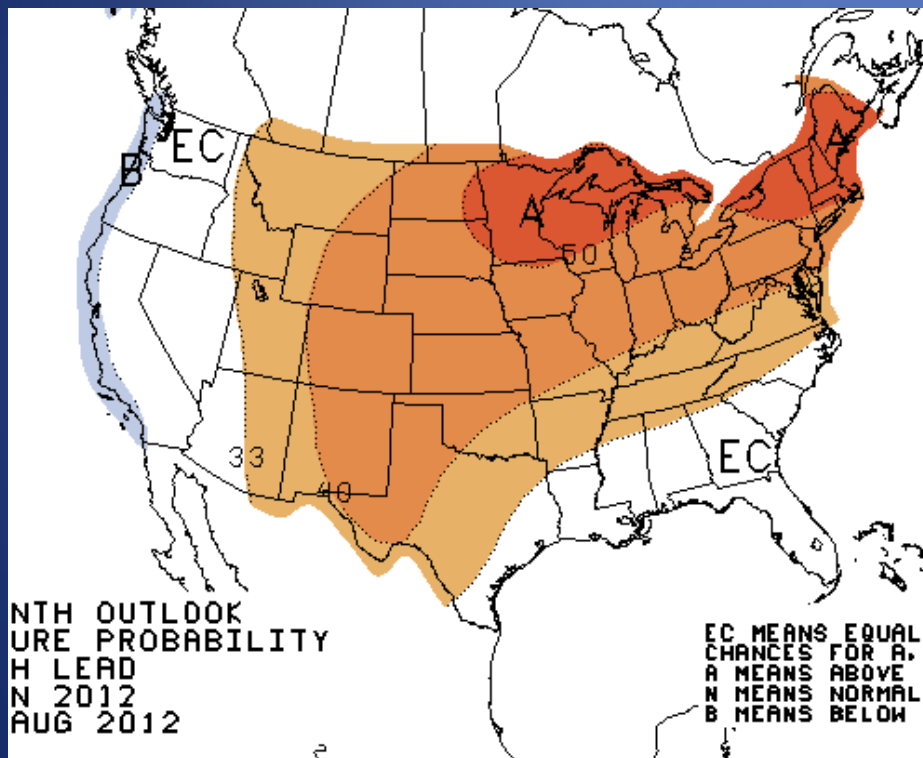


Temperature

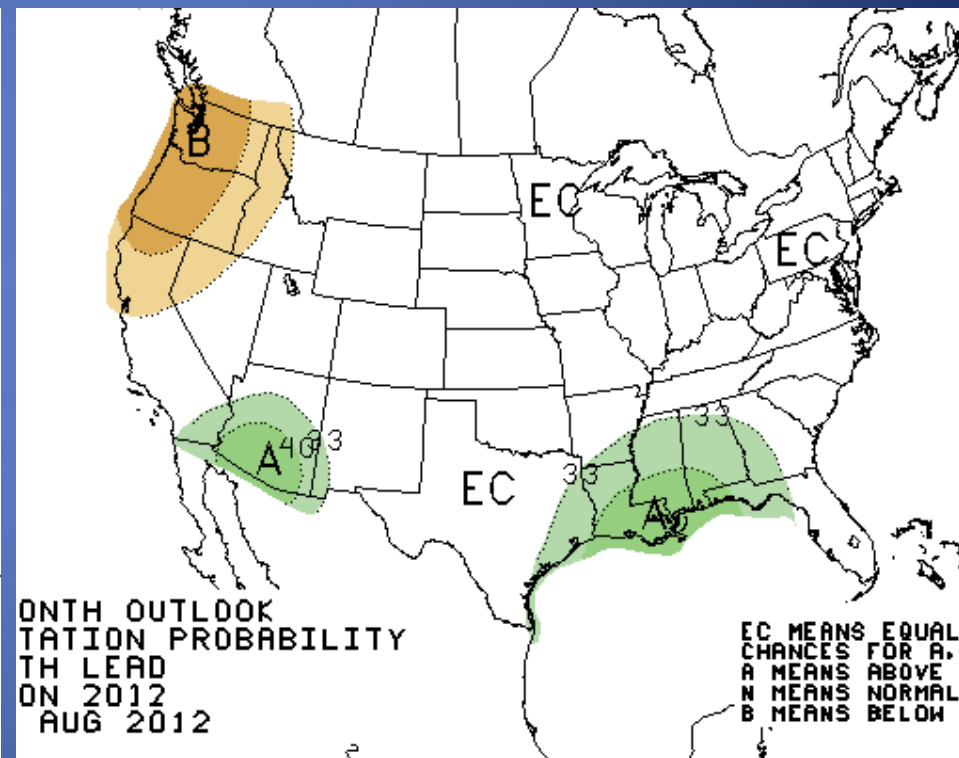


Precipitation

3 Month Temperature and Precipitation Probabilities (September - November)



Temperature



Precipitation

http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1

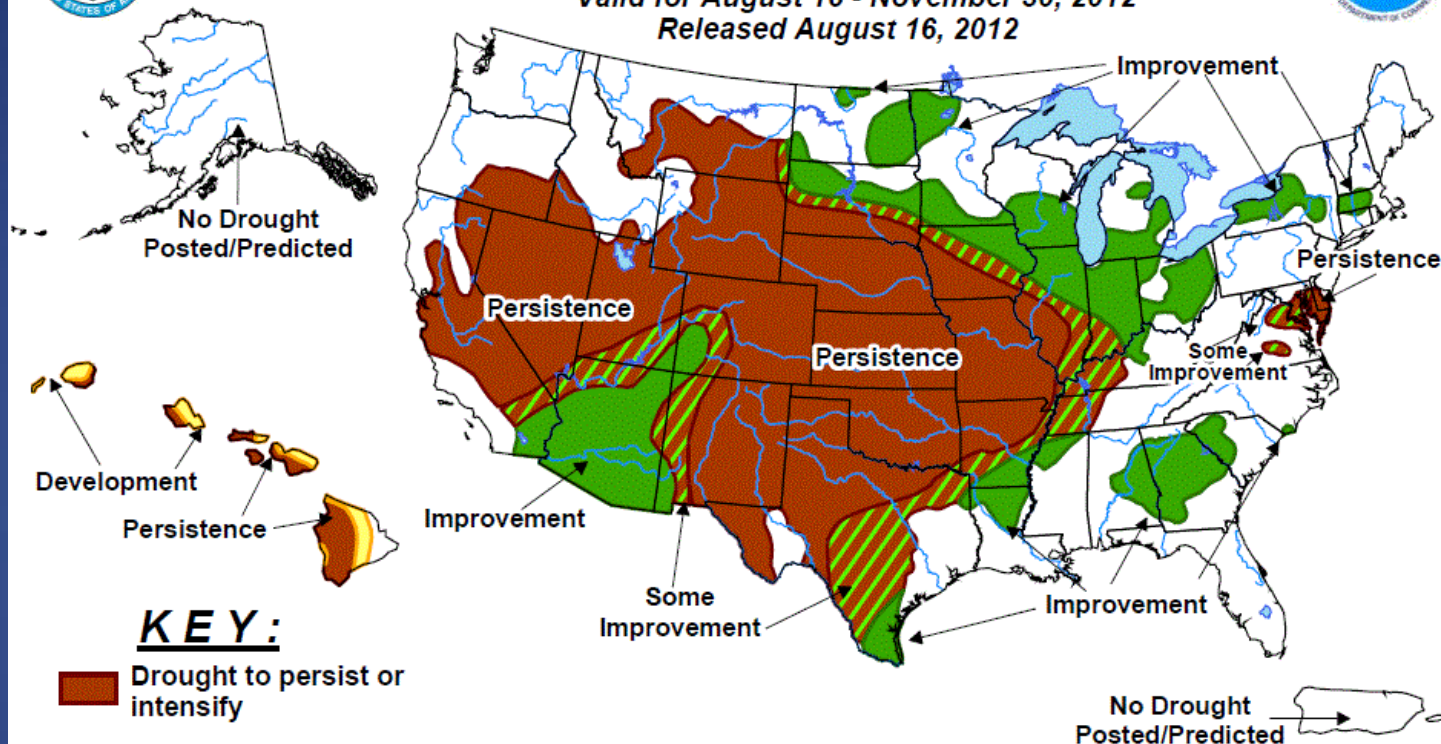


U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for August 16 - November 30, 2012

Released August 16, 2012



KEY:

- Drought to persist or intensify
- Drought ongoing, some improvement
- Drought likely to improve, impacts ease
- Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

Fire issues

- Red flag warning today
- Cooler temperatures for the rest of the week
- Slight chances for precipitation – not widespread
- Fire behaviors continue to be worse on record and getting worse
- Typical safety areas burning
 - Wetlands, cattails, pastures, croplands
 - Organic matter burning
- Extreme fire behaviors expected in western/southern SD and Black Hills



Drought Outlook Summary

- Cooler this week/little precip – maybe east river late in the week
- Return to warmer than average in Sept. likely
- Staying dry – no pattern changes in the near future
- Watching El Nino

